



DEPARTMENT OF SPECIAL SERVICES

June 2, 2004

Mr. Kenneth R. Bieri
for the New Castle County
Planning Board
87 Reads Way
New Castle, Delaware 19720

**Re: Application No. 03-0491Z
Substitute No. 1 to Ordinance 03-041 to Rezone 1.38 Acres
From S (Suburban) to S and H (Historic) Zoning Overlay**

Dear Ken:

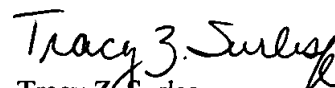
In follow-up to yesterday's public hearing regarding the above-referenced matter, enclosed please find the following:

1. Letter from Allen A. Jayne, P.E., Manager, Structural Engineering, Tetra Tech Inc. to Barry Wilson, New Castle County ("NCC"), dated March 17, 2000.
2. Tetra Tech Inc., *Report on Inspection and Evaluation 2818 Grubb Road - Wilmington*, dated January 4, 1999.
3. Letter from Jennifer W. Matherly, Project Engineer, Environmental Testing, Inc. to Betsy Eitel, NCC, dated April 16, 2001 and enclosing a lead based paint survey.
4. Letter from Jennifer W. Matherly, Project Engineer, Environmental Testing, Inc. to Betsy Eitel, NCC, dated April 27, 2001 and enclosing an asbestos survey.

Please note that the March 17, 2000 estimate for structural repairs (\$80,000-\$100,000) would need to be adjusted to reflect inflation. Further, it does not account for necessary mechanical and electrical repairs.

Thank you again for the opportunity to appear before the Planning Board regarding this matter.

Very truly yours,


Tracy Z. Surles
Senior Manager

TZS/III
Enclosures

cc: Ms. Stephanie Bruning for Historic Review Board, NCC Land Use - w/enc.



TETRA TECH, INC.
56 WEST MAIN STREET
SUITE 400
CHRISTIANA, DE 19702-1501
TELEPHONE (302) 739-7551

March 17, 2000
RCN 0943

Mr. Barry Wilson
New Castle County
Department of Administrative Services
William J. Conner Building
187-A Old Churchmans Road
New Castle, DE 19720

Dear Mr. Wilson:

As you requested, I reviewed the evaluation report for the property located at 2818 Grubb Road in Wilmington, which I prepared last year, and have considered the recommended repairs described in the report. These repairs include the following:

- Replacement of the existing wood joists and flooring at the first floor level.
- Replacement of the exterior wall sill plates.
- Replacement of two existing headers supporting the stone foundation walls.
- Repair, patching, and repointing of the existing stone foundation walls.
- Replacement of the two existing stairs within the house.
- Repair of cracked walls and skewed door frames resulting from the sagging floor framing.
- Installation of an exterior basement waterproofing system.
- Repair and restoration of the existing masonry chimney located at the west end of the house.

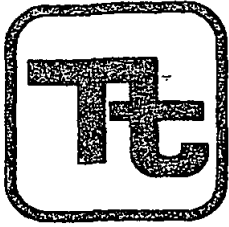
I estimate the construction cost for these repairs will total between eighty thousand and one hundred thousand dollars. This includes installation of temporary supports, minor piping modifications, demolition and construction phasing, and similar conditions associated with this project. The estimate also includes a twenty percent contingency to allow for repair of additional deficiencies which will be discovered as the existing construction is demolished.

Please note, however, the estimate does not include renovation of the mechanical or electrical systems in the house. Additionally, the estimate does not include aesthetic or finish improvements to the interior or exterior of the house.

Tetra Tech is pleased to have the opportunity to assist New Castle County with this project. If there are any questions, please don't hesitate to call me.

Sincerely,

Allen A. Jayne, P.E.
Manager, Structural Engineering



January 4, 1999
RCN 0943

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CHRISTIANA, DE 19702-1501
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REPORT ON INSPECTION AND EVALUATION 2818 GRUBB ROAD - WILMINGTON

On December 1, 1998 and again on December 3, 1998, engineers from Tetra Tech performed an inspection of the house and storage barn located at 2818 Grubb Road in Wilmington. The purpose of this inspection was to document the existing construction, identify significant structural deficiencies, and develop recommendations for repair and correction of these deficiencies.

The report is presented in three parts, as follows:

- Part I - House Description and Evaluation
- Part II - Storage Barn Description and Evaluation
- Part III - Recommendations

Photographs documenting existing conditions within the house and the storage barn are included in Part I and Part II, respectively.

Part I - House Description and Evaluation

The house consists of three floors and a basement. The house was built in two phases; the main house, the first phase of construction, is approximately 100 to 150 years old. A second-phase addition is less than 100 years old. The main house measures approximately twenty-five feet by fifteen feet; the addition measures approximately thirteen feet by twenty-one feet.

Construction is concealed by wall and ceiling finish materials on the first and second floors of both portions of the house. First level framing is exposed in the basement, however, and the roof framing is partially exposed in the attic.

In the original house timber floor joists are seven and three-quarter inches deep by two and three-quarter inches wide, and are spaced at eighteen inches on-center. The joists span fifteen feet between stone bearing walls. The basement floor is cast-in-place concrete. A wood lintel consisting of two, three-by-eight timbers laid sideways has been installed at the location of an opening in the basement wall leading into the phase-two addition. Timber roof joists are three inches wide by four inches deep. The spacing of the roof joists varies between twenty-four inches and twenty-eight inches on-center. The joists are supported on wood stud bearing walls at the ends and are pegged together at the mid-span peak. Total span of the joists is fifteen feet. Nominal three inch wide by one inch thick wood furring spans between the joists, and metal roofing has been nailed to the furring.

In the phase-two portion of the house, exposed floor framing in the basement consists of nominal three inch wide by eight inch deep timber joists spaced at seventeen to nineteen inches on-center and spanning thirteen feet between bearing walls. At the north end of the house a concrete masonry wall appears to have been constructed inside the original stone exterior foundation wall. This masonry wall also forms the

foundation for the fireplace above. Access to the basement is by a narrow, timber stairway constructed on the north side of the wall dividing the older main house from the newer addition. Roof framing in the attic is concealed by ceiling finish construction.

Numerous structural deficiencies and construction irregularities were noted in both the original house and the addition. Sagging framing, holes, and deteriorated conditions were noted in all areas of the house. In the basement of the original house, the following items were noted:

Puddles of water were noted on the basement floor. Parging had fallen from the foundation wall due to water seepage through the wall.

A hole was noted in the foundation wall at the location where the sump pump discharge piping was extended through the wall. A smaller hole was noted at a joist bearing located under the entrance to the first floor.

The stud wall sill plate on top of the stone foundation wall along the east side of the house (fronting on Grubb Road) is severely deteriorated, apparently from insect damage.

Two floor joists were repaired by the installation of new wood joists adjacent to the existing damaged joists.

One floor joist has been completely cut away to permit installation of a mechanical duct.

One floor joist is severely cracked through the full thickness and for the full length of the joist.

Floor joists are visibly sagging two to three inches at midspan. At one location a timber post has been placed under one joist as additional support.

Several joists have been notched and cut, some extensively, to permit installation of pipes, ducts, and wiring.

Insect damage was evident in several joists.

Two steel pipes and a steel channel section have been installed under the timber lintel supporting the exterior wall at the stair leading to the exterior. The steel sections are corroded and deteriorated.

The timber header located between the original house and the phase-two addition has been damaged by insects and is visibly sagging.

In the basement of the phase-two addition portion of the house, the following items were noted:

The stairway from the first floor to the basement has been constructed without landings at the top

January 4, 1999
2818 Grubb Road
RCN 0943
Page 3

and the bottom of the stairs. The stairway leads directly into the basement wall, and has no guardrail or handrail.

- The joist located at the edge of the floor opening for the stair has been damaged by insect infestation.

Floor and wall construction at the first and second levels is concealed by finish materials. Consequently, a detailed inspection of the construction was not possible. However, the following items were noted:

- The first floor of the house is visibly sagging approximately two to three inches.

- A large crack was noted in the plaster at the intersection of the wall and the ceiling at the first level, in a closet under the stair leading to the second level.

- Door frames at several locations are not level, and the doors have been adjusted in an attempt to make them operable.

- The stairs leading from the first floor to the second floor in the original house are built with seven inch risers and seven inch treads. Because the treads are small, the stair is steep and does not comply with current building codes.

In the attic, only the roof construction in the original house is visible. The construction in the phase-two addition is concealed by finish materials. The following items were noted in the original house:

- A large hole in the chimney located at the west end of the house was noted. Wood framing adjacent to the hole is slightly charred.

- An exposed electrical splice was noted in the attic floor framing.

Photographs on the following pages document the conditions noted in the house.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 4



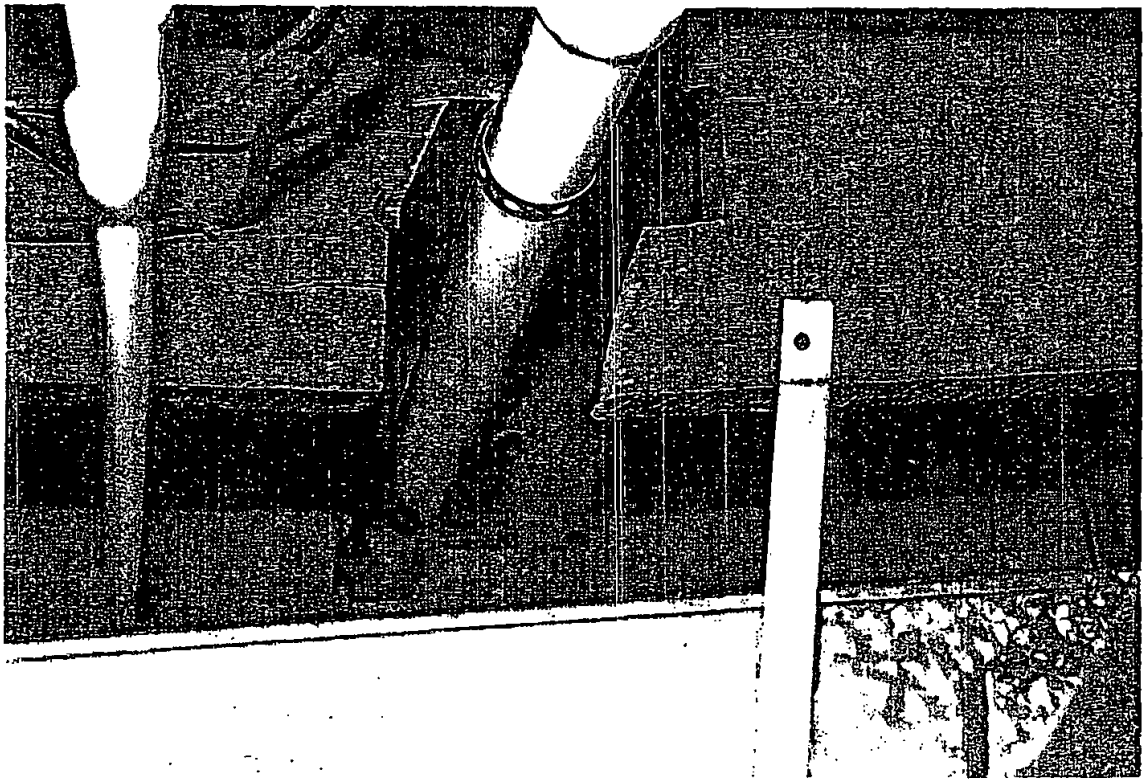
South elevation of house.

January 4, 1999.
2818 Grubb Road
RCN 0943
Page 5



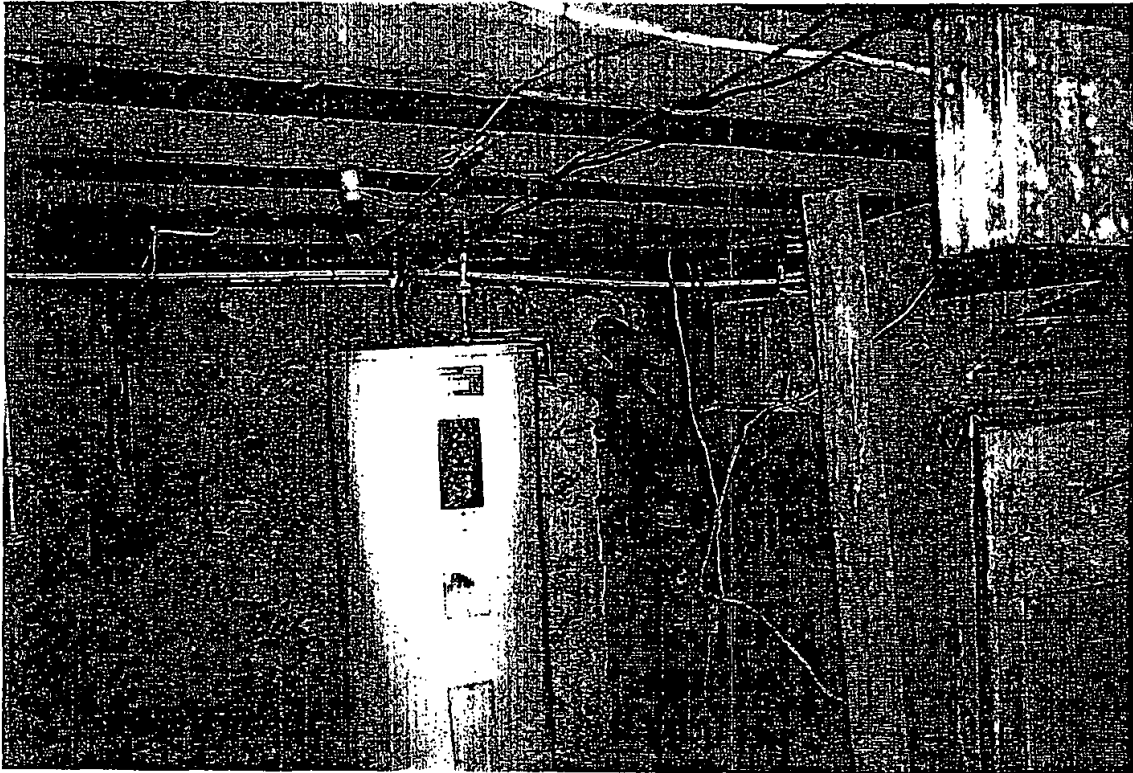
East elevation of house.

January 4, 1999.
2818 Grubb Road
RCN 0943
Page 6



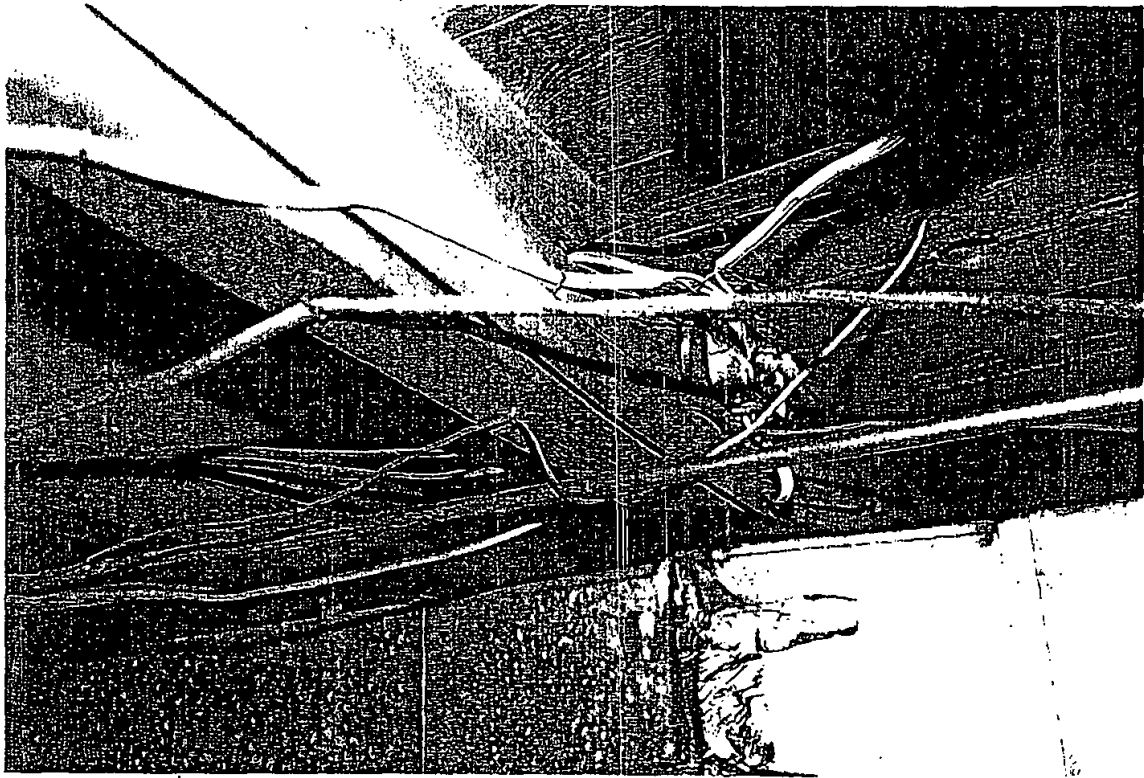
First floor framing beams of main house, with holes
cut for installation of plumbing.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 7



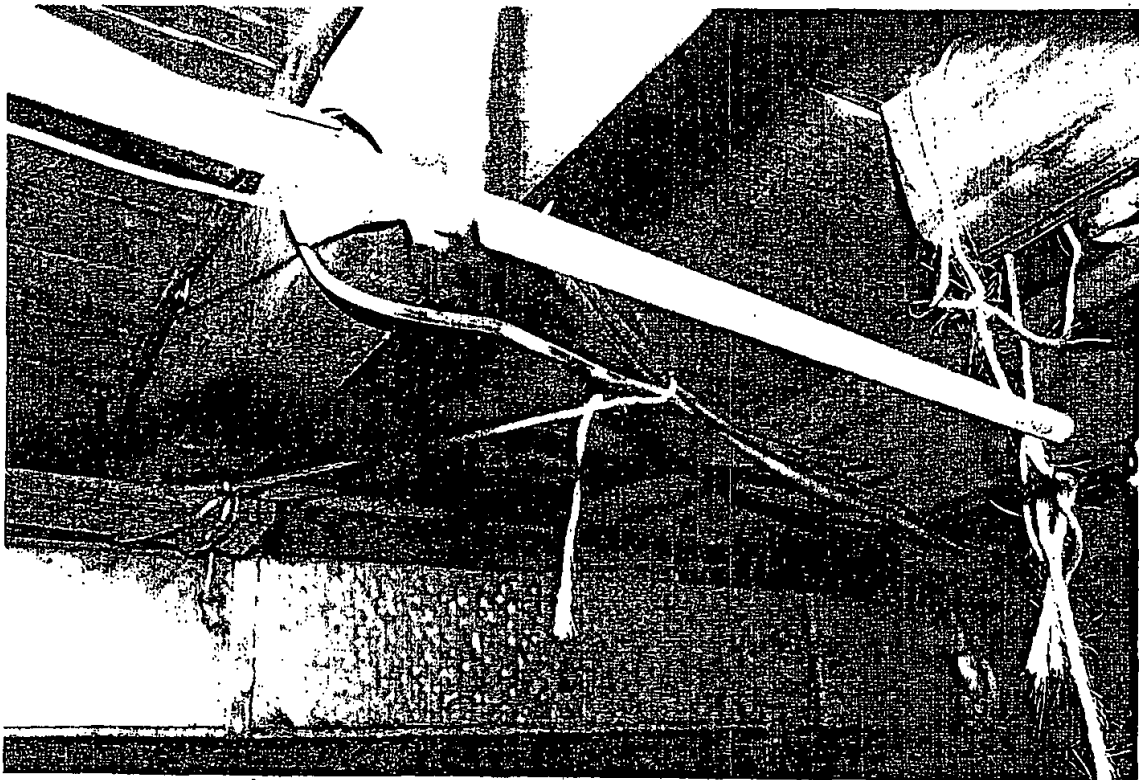
First floor framing beams of main house. Note water on floor behind water heater, and post at right installed as support under one floor beam.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 8



Severe split in first floor framing beam of main house.
Split extends through the thickness of the beam.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 9



First floor framing beam in main house partially removed
to allow installation of mechanical equipment.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 10



Basement wall on south face of main house.
Note parging has fallen from wall due to water leakage.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 11



Exposed roof framing in attic of main house.

January 4, 1999
2818 Grubb Road
RCN 0943
Page 12



Settlement crack in ceiling of closet located under the stairs
to the second level of the main house.